

Eat Smart Be Smart

Label Logic

 **Grade Level:** Third **Lesson Time:** 30 Minutes

 **Integrated Core Subjects:** Math and Health Enhancement

 **Montana Content Standard:** Math Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.

 **Montana Content Standard:** Health Enhancement 5: Students demonstrate the ability to use critical thinking and decision making to enhance health.

 **Objectives:** The students will learn how to read a food label and use math skills (multiplication) to determine information on a label; understand the information on a food label; understand how nutrient content is affected when foods are processed.

Lesson/Activity

1. Distribute the Basic Training: The Nutrition Facts Food Label handout to each student and use it as the foundation for this lesson.
2. Ask students what the Nutrition Facts label tells us about a food and why it is important to know how to read it. The answer is: to understand the nutritional value of foods; to help make healthy choices.
3. Ask students to raise their hand if they have ever read a Nutrition Facts label and what they learned from it. Explain that they will be looking at Nutrition Facts labels and learning what some of the terms mean on the labels.
4. Have students volunteer to read the boxes on the right-hand side of the Basic Training handout.
 - **Serving size:** This is the amount that should be eaten. All the nutrition information on the label is based on this amount. Show a one-cup serving by asking a student to measure out one cup of cereal and pour it into a bowl using a measuring cup.
 - **Servings per container:** Be aware that often there is more than one serving per container. Food companies may want the product to appear healthier than it is by listing nutrition information for a very small serving size. Ask students how many servings of the food is in this container per the label on the basics handout. How many calories would there be if you ate both servings?
 - **Nutrition numbers:** Have students focus on Calories and Total Fat at this age level. Ask students if they know what is a calorie. Explain that a calorie is a measure of energy in food. Our bodies need calories to grow, stay healthy and have energy to learn and go out and play. Calories come from three sources: carbohydrates, protein and fat. All beverages have calories except one, can they guess which beverage that is? The answer is plain water.

Materials Needed

- Hang the poster, Read It Before You Eat It, (see Essential Tools section).
- A copy of Basic Training: The Nutrition Facts Food Label handout for each student
- A copy of the Label Logic work sheet for each student

Optional Materials

- To demonstrate serving size, a 1 cup measure, a bowl, and a box of a high-fiber cereal like Total® or Cheerios®
- Teacher References: Nutrition Facts Labeling Web site: <http://www.cfsan.fda.gov/~dms/foodlab.html>
- Food processing information Web site: http://en.wikipedia.org/wiki/Food_processing

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5. Ask the students how we burn calories for energy. We burn calories through growing and physical activity. It is important to balance the calories that you eat with the calories you burn so our bodies stay healthy. Ask students what they know about fat. Explain that we need some fat to protect our organs, to give us energy, and to transport some vitamins; but many people get too much fat. Ask them if they know how they can limit their fat intake. The answer is by choosing low-fat or fat-free dairy and lean protein sources and limiting fried foods. Emphasize that by learning to read labels, students can determine if a food has a lot of fat in it.

Percent Daily Values (%DV): Point out that the number tells the amount of the nutrient in the serving size of the food item listed. Use the Read It Before You Eat It poster to point out that if the percent daily value (% DV) is 5% or less, this food is a poor source of a nutrient, and, if the %DV is 20% or higher, than it is an excellent source of this nutrient. Use the example Nutrient Facts label on the poster. Ask the students to tell you the %DV is for fat and vitamin C. What does the label tell them? For example, since the food featured has a high percentage of fat, they may want to have just one serving. Since it is not a good source of vitamin C, they should eat a fruit or vegetable with it to help to balance the meal (get more nutrients).

Hit Your Targets: No need to cover this information at this grade level.

6. Distribute the Label Logic work sheet and have students complete it. This work sheet explores the fat content and vitamin C content in foods. It will also introduce the idea that when a food is processed (goes from a whole, fresh state to another form), the nutrient content can change. Encourage them to choose fresh sources of food as much as possible. Note: "grams of fat/one serving" is listed under Total Fat on the label.
7. Discuss the answers. Emphasize that the more the food is processed (when food is changed from its original form like a fresh potato to French fries) most likely the more fat and less nutrition it will have.
8. Reinforce the importance of reading the label to help make healthier choices. For a homework assignment, ask the students to bring in a food label of a healthy food or beverage and explain the reason it is healthy by reviewing the Total Fat or Vitamin C information on the food label. Ask the students to demonstrate the serving size on the label by using a common measure.

Outcome Goals



Students will know how to read a food label.



Students will understand what information a label provides.

Students will conclude that processing affects the nutrients in a food

Extending the Lesson

For more practice on math skills, have the students complete the Where's the Fat work sheet and discuss healthier choices at the fast food restaurants based on the fat content of entrees.

Acknowledgments/Adapted From

Nutrition Fun with Brocc & Roll, by Connie Liakos Evers; National Cattlemen's Beef Association: It's All About You; MyPyramid for Kids/U.S. Department of Agriculture Team Nutrition; and Denise Zimmer, RD

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